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| 10/034,751  | 12/27/2001  | Ren Egawa            | 01-MV-0111<br>(STMI01-01111) | 1889                   |
| 7590<br>Lisa K. Jorgenson<br>STMicroelectronics, Inc.<br>1310 Electronics Drive<br>Carrollton, TX 75006 |             |                      | EXAMINER<br>TEKLE, DANIEL T  |                        |
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* REN EGAWA and MICHAEL ROBERT HARRIS

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Appeal 2009-0101  
Application 10/034,751<sup>1</sup>  
Technology Center 2600

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Decided: January 15, 2009

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Before KENNETH W. HAIRSTON, ROBERT E. NAPPI,  
and KARL D. EASTHOM, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1 to 21. We have jurisdiction under 35 U.S.C. § 6(b).

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<sup>1</sup> Application filed December 27, 2001. The real party in interest is STMicroelectronics, Inc.

We reverse.

The Invention

Appellants' claimed invention is directed to a method and apparatus (Figs. 1, 2, and 7) for displaying a digital still image file 210 using a DVD player 100 using an MPEG standard, the apparatus consisting of a controller 110 and an MPEG processor 120 (*see* claims 1, 10, and 19; Spec. 4; App. Br. 6). The controller 110 divides the digital still image file 210 into a plurality of sub-picture files (files A, B, and C in Fig. 3) for further processing by the MPEG processor 120 (*see* claim 1; Spec. 4).

Claim 1 is representative of the claims on appeal, and reads as follows:

1. For use in a digital video player, an apparatus for displaying a digital still image file using a Moving Picture Expert Group (MPEG) standard, the apparatus comprising:

a controller capable of dividing the digital still image file into a plurality of sub-picture files, the controller further capable of constructing an MPEG video stream from the plurality of sub-picture files; and

an MPEG processor capable of decoding the MPEG video stream to generate a plurality of decoded sub-pictures and scaling down the plurality of decoded sub-pictures to a plurality of reduced size decoded sub-pictures.

The Rejections

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

|        |                 |                                       |
|--------|-----------------|---------------------------------------|
| Werner | US 6,151,074    | Nov. 21, 2000                         |
| Demos  | US 6,728,317 B1 | Apr. 27, 2004<br>(filed Apr. 7, 2000) |

The Examiner rejected claims 1 to 8, 10 to 17, 19, and 20 under 35 U.S.C. § 102(b) as being anticipated by the teachings of Werner.

The Examiner also rejected claims 9, 18, and 21 under 35 U.S.C. § 103(a) as being obvious over the combined teachings of Werner and Demos.

Rather than repeat the arguments of Appellants or the Examiner, we refer to the Briefs<sup>2</sup> and the Answer<sup>3</sup> for their respective details.

### ISSUE

The Examiner contends that Werner teaches or suggests *dividing a digital still image into a plurality of sub-picture files* at column 5, lines 27 to 37 (Ans. 3-5).

Appellants contend that Werner fails to teach or suggest *dividing a digital still image file into a plurality of sub-picture files* (hereinafter, the “dividing ...” feature), as recited in all of the claims on appeal (App. Br. 11-13; Reply Br. 2).

The Examiner replies that the “dividing ...” feature is inherent in Werner (Ans. 7). The Examiner then asserts that “[t]here is no difference between constructing an MPEG video from the plurality of sub-picture[s] and constructing an MPEG video from [a] plurality of Macroblock[s] since sub-picture[s are][sic] made of [a] plurality of blocks” (Ans. 7).

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<sup>2</sup> We refer to the Appeal Brief filed July 16, 2007, and the Reply Brief filed December 26, 2007, throughout this opinion.

<sup>3</sup> We refer to the Examiner’s Answer mailed November 14, 2007, throughout this opinion.

The limitation of “dividing the digital still image file into a plurality of sub-picture files” occurs in all independent claims 1, 10, and 19.

Appellants present specific arguments primarily as to claim 1 (App. Br. 10-13; Reply Br. 2-4), relying on the arguments as to claim 1 to support patentability of claims 2 to 21 (*see* App. Br. 13-14). We consider claim 1 to be representative.

Accordingly, the issue is: Have Appellants shown that the Examiner erred in determining that Werner teaches or suggests a controller or method step for “dividing the digital still image file into a plurality of sub-picture files,” as required by all of the claims on appeal?

#### FINDINGS OF FACT

The findings of fact throughout this Decision are supported by a preponderance of the evidence of record.

##### *Appellants’ Disclosure*

1. Appellants describe and claim a method and apparatus (Figs. 1 and 7) for displaying a digital still image file 210 (*see* Fig. 2) using an MPEG standard including using a controller 110/115 to divide the digital still image file 210 into a plurality of sub-picture files (*see* sub-picture files A, B, and C in Fig. 3) for further processing (*e.g.*, MPEG decoding and image resizing) by an MPEG processor 120 (*see* claims 1, 10, and 19; Spec. 4 and 8-12).

2. Appellants recognize it is known in the art that MPEG (Moving Picture Expert Group) is a video compression and decompression standard or format, and that JPEG (Joint Photographic Experts Group) is a digital still image compression and decompression standard or format (Spec. 2:5-11).

Appellants recognize that digital still image (*i.e.*, JPEG) standards are not compatible with video or moving picture standards (*i.e.*, MPEG) (Spec. 2:11-12), and that there is a need to display digital still images using DVD or MPEG processors (Spec. 2:12-14).

3. Although Appellants recognize that one solution for displaying JPEG images on a DVD player having an MPEG processor is to simply add a JPEG processor to the DVD player (Spec. 2:15-18), Appellants also recognize that this solution (adding a JPEG processor to the DVD player) is costly (Spec. 2:17-18).

*Werner*

4. Werner describes a video processing unit 13 that “receives an input signal carrying compressed video data” (col. 2, ll. 35-37), and “decodes compressed video data and resizes the image represented by the video data” (Abs.). Werner discloses that the input signals are digital bitstreams of compressed data (col. 3, ll. 26-29), and that the preferred method of data compression is the MPEG standard (col. 3, ll. 31-32). Werner’s claimed invention is directed to “[a] digital video processing unit that decompresses an input signal carrying compressed video data and resizes the image represented by the data” (*see* independent claim 1 at col. 6, ll. 51-53), and a “video display system” which “receives a compressed video signal” and decompresses the compressed video signal (*see* claim 8 at col. 7, ll. 28-33).

5. Werner teaches video processing method and apparatus including a video processing unit 13 having a memory 23, a decoding engine 24, and a scaling engine 25 (Figs. 1 and 2; col. 2, ll. 35-45; col. 3, ll. 6-15; col. 4, ll. 37-46). Werner teaches JPEG and/or MPEG decoding of input data using either still or full-motion decompression algorithms appropriate to the input

signal format (*see* discussion of decoding engine 24 at col. 5, ll. 28-35), but is silent as to transcoding (encoding using one format and decoding using a different format).

6. Werner describes the operation of decoding engine 24 as follows:

Decoding engine 24 is a processor programmed to decompress the video data. It may be programmed to support various compression standards, such as the JPEG, MPEG, MPEG2, Px64, CCITT, etc. The programming can be for either still or full-motion decompression algorithms. Decoding engine 24 could be a multi-format decoding engine, switchable between decompression algorithms to perform whatever decompression method is appropriate for the input signal.

(Col. 5, ll. 27-35).

7. Werner does not teach dividing a digital still image file into a plurality of sub-picture files, nor does Werner teach processing sub-picture files from a digital still image file using an MPEG decoder. Werner fails to provide any description or discussion of *dividing* a still image into sub-picture or sub-image files for construction of an MPEG video stream and subsequent MPEG processing.

#### *Demos*

8. Demos teaches an MPEG video processing method and apparatus for processing moving pictures using an overlapped block motion compensation technique. (Abs.; col. 43, ll. 56-59).

9. Demos does not teach dividing a digital still image file into a plurality of sub-picture files, nor does Demos teach processing sub-picture files from a digital still image file using an MPEG decoder.

## PRINCIPLES OF LAW

Anticipation is established when a single prior art reference discloses expressly or under the principles of inherency each and every limitation of the claimed invention. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1347 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

## ANALYSIS

Appellants contend that Werner fails to teach *dividing a digital still image file into a plurality of sub-picture files* (hereinafter, the “dividing ...” feature) (App. Br. 11-13; Reply Br. 2). Appellants also contend that Werner and Demos, taken singly or in combination, fail to teach or suggest this “dividing ...” feature (App. Br. 13-14). Based on Findings of Fact 4 to 7 and 9, and the reasons that follow, Appellants’ arguments are persuasive.

The Examiner finds that the “dividing ...” feature is inherent in Werner’s discussion at column 5, lines 27 to 37 (Ans. 7). We do not find that the evidence supports this finding. Werner fails to teach *dividing a digital still image file into a plurality of sub-picture files* (Finding of Fact 7). Anticipation is established only when a single prior art reference (*i.e.*, Werner) discloses each and every limitation of the claimed invention (*i.e.*, the “dividing ...” feature of claims 1 to 21). *Atlas Powder Co. v. IRECO, Inc.*, 30 F.3d at 1347; *Paulsen*, 30 F.3d at 1478-79. Because Werner does not teach the “dividing ...” feature of the claims on appeal, Werner lacks at least one feature of claims 1 to 8, 10 to 17, 19, and 20 and cannot anticipate.

The portion of Werner’s disclosure relied on by the Examiner as *inherently* teaching the “dividing ...” feature fails to even *suggest* the



“dividing ...” feature (*see* Finding of Fact 6). Specifically, even if column 5, lines 29 to 32 teaches processing and decompressing an input signal carrying a compressed digital still image (*i.e.*, JPEG), lines 32 to 36 of that same column merely suggest decoding or decompressing the JPEG image using a JPEG decoder. Werner does not teach or suggest transcoding – using an MPEG processor to process and decode an input JPEG (*i.e.*, digital still image), nor does Werner suggest dividing a digital still image in multiple sub-pictures for processing. Accordingly, Werner fails to suggest *dividing a digital still image file into a plurality of sub-picture files* as recited in claims 1 to 21.

For similar reasons discussed above with respect to claim 1, we are persuaded by Appellants’ arguments with respect to the rejection of claims 9, 18, and 21 under § 103(a) over Werner and Demos (*see* App. Br. 13-14). Neither Werner nor Demos teaches or suggests dividing a digital still image file into a plurality of sub-picture files, and then processing sub-picture files from a digital still image file using an MPEG decoder (Findings of Fact 7 and 9).

In view of the foregoing, Appellants have shown that the Examiner erred in determining that Werner teaches or suggests “dividing the digital still image file into a plurality of sub-picture files.” Therefore, Werner fails to expressly or inherently teach all of the structural limitations of independent claims 1, 10, and 19 on appeal. The same holds true for dependent claims 2 to 8, 11 to 17, 19, and 20 because they include the noted “dividing ...” limitation, and for dependent claims 9, 18, and 21 because Werner and Demos fail to teach or suggest the noted “dividing ...” limitation.

### CONCLUSION OF LAW

For the foregoing reasons, Appellants have shown that the Examiner erred in determining that Werner teaches or suggests a controller or method step for “dividing the digital still image file into a plurality of sub-picture files.”

### ORDER

We reverse the Examiner’s anticipation rejection of claims 1 to 8, 10 to 17, 19, and 20 under § 102(b).

We also reverse the Examiner’s obviousness rejection of claims 9, 18, and 21 under § 103(a).

### REVERSED

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